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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Frank Scott

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EXAMINER

LEBASSI, AMANUEL

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/579,881	Applicant(s) SCOTT ET AL.	
	Examiner AMANUEL LEBASSI	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11-23 and 25-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-23 and 25-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1-5, 8-9, 11-19, and 22-23, 25-29 rejected under 35 U.S.C. 103(a) as being unpatentable over Choi et al. US 7096020 in view of Soderbacka et al. US 20030114158.

Regarding claim 1, Choi discloses a method of controlling communications in a telecommunications system (**col. 1, lines 19-22 - system and method for implementing handoffs between heterogeneous networks**). Choi discloses first and second subsystems each including a radio access network comprising base stations and at least a radio network controller connected to at least some of said base stations and to a core network switch (**Col. 1, lines 34-42 and Fig. 1, BTS and Node B, BSC and RNC, MSC and UMSC**), the first subsystem being adapted to support first and second communications (**WCDMA (3G) and CDMA(2G) – Fig 1**) and the second subsystem being adapted to support the second communications (**CDMA, (2G) – Fig. 1**). Choi discloses the method comprising the following steps in the case of a first mobile terminal having a call in progress with a second terminal under the first communications via at least a

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base station of the radio access network of the first subsystem (**col. 1, lines 54-64, where the user equipment or mobile station enters the area of CDMA from the WCDMA network**): the radio network controller of the first subsystem detecting a call transfer condition for transferring the call to a base station of the radio access network of the second subsystem (**col. 1, lines 61-67 where a handoff i.e. a call transfer condition for transferring the call to a base station**). Choi discloses informing the core network switch to which the radio network controller of the first subsystem is connected of said detection of a call transfer condition (**col. 2, lines 8-14 where the mobile station notify the WCDMA network of its ESN**) and • if the second subsystem is not adapted to process the call under the first communications, requesting a change of in order for said call to continue under the second communications (**col. 2, lines 12-35 where a request for change is made because the CDMA network is unable to process the call under WCDMA and col. 4. lines 60 – col. 5, line 3 where if the WCDMA signal strength is weak, the controller transitions to the second state i.e. the controller requests from the CDMA network**).

Choi is silent on change of services. However, Soderbacka teaches change of services (paragraph [0012] where the mobile has to handoff from 3g WCDMA type to a 2g GSM (voice or audio) type).

At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the invention of Choi and add change of

services. The motivation would be in order to guarantee a continued and satisfactory supply (**paragraph [0005]**).

Regarding claim 2, Choi modified by Soderbacka discloses wherein the radio network controller of the first subsystem is connected to a core network switch and the radio network controller of the second subsystem is connected to a second core network switch, wherein, after the first switch has been informed of said detection of a call transfer condition, a request to transfer the call from the first switch to the second switch is transmitted (**col. 2, lines 14-19, where radio resource information to be transmitted between MAPs (Mobile Application Parts) in heterogeneous networks: the UMSC (first switch) transmits information to the MSC (second switch)**), and wherein the inability of the second subsystem to process the call under the first communications is indicated to the first switch by a transfer failure message sent in response to said transmission of the call transfer request (**col. 2, lines 36-38 where handoff is impossible under current situations**).

Regarding claim 3, Choi discloses wherein the first subsystem is of the third generation and the second subsystem is of the second generation (**col. 1, lines 34-42 and Fig. 1, where the first subsystem is 3G and the second subsystem is 2G**).

Regarding claim 4, Choi modified by Soderbacka discloses wherein the first communications service necessitates a higher transmission bit rate than the second communications service (**col. 4, lines 20-28**).

Regarding claim 5, Choi modified by Soderbacka discloses wherein each communications service is associated with coding over at least a segment of the call and the service change request includes a request to change the coding over said call segment (see above).

Regarding claim 8, Soderbacka teaches wherein the second communications service is a voice telephone service (**paragraph [0002] where second communications service is a GSM voice service service**).

Regarding claim 9, Choi discloses wherein Adaptive Multi rate(AMR) coding is associated with the second communications (**col. 4, lines 20-22- where the WCDMA processing unit includes AMR**).

Regarding claim 11, the combination of above discloses wherein, if the second communications service necessitates a bit rate over a radio segment that is strictly lower than a maximum bit rate value authorized by the second subsystem, the surplus bit rate is used to transmit data via at least said base station of the radio access network of the second subsystem (see above).

Regarding claim 12, Choi modified by Soderbacka discloses wherein the service change request is transmitted to the first mobile terminal and to the second **terminal (col. 2, lines 49-55)**.

Regarding claim 13, Choi modified by Soderbacka discloses wherein the service change request is transmitted to the second terminal via at least a switch, a radio network controller and a base station to which the second terminal is connected **(col. 2, lines 14-38)**.

Regarding claim 14, Choi discloses wherein the service change request includes a request for modification of radio access bearer characteristics of the call respectively at the mobile first terminal end and at the second terminal end **(col. 6, line 28-36 and Fig. 6)**.

Regarding claim 15, Choi discloses a core network switch of a telecommunications system (**col. 1, lines 19-22 - system and method for implementing handoffs between heterogeneous networks**). Choi discloses first and second subsystems each including a radio access network comprising base stations and at least a radio network controller connected to at least some of said base stations, at least some of the radio network controllers also being connected to said core network switch, the first subsystem being adapted to support first and second communications and the second subsystem being adapted to support the second communications (**Col. 1, lines 34-42 and Fig. 1, BTS and Node B, BSC and RNC, MSC and UMSC**), said core network switch comprising, in relation to a first mobile terminal having a call in progress with a second terminal under the first communications via a base station of the radio access network of the first subsystem (**col. 1, lines 54-64, where the user equipment or mobile station enters the area of CDMA from the WCDMA network**). Choi discloses • means for receiving an indication that the radio network controller of the first subsystem has detected a call transfer condition for transferring the call to a base station of the radio access network of the second subsystem (**col. 1, lines 61-67 where a handoff i.e. a call transfer condition for transferring the call to a base station**) and means for requesting a change

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in order for said call to continue under the second communications if the second subsystem is not adapted to process the call under the first communications (**col. 2, lines 12-35 where a request for change of is made because the CDMA network is unable to process the call under WCDMA and col. 4. lines 60 – col. 5, line 3 where if the WCDMA signal strength is weak, the controller transitions to the second state i.e. the controller requests from the CDMA network**).

Choi is silent on change of services. However, Soderbacka teaches change of services (paragraph [0012] where the mobile has to handoff from 3g WCDMA type to a 2g GSM (voice or audio) type).

At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the invention of Choi and add change of services. The motivation would be in order to guarantee a continued and satisfactory supply (paragraph [0005]).

Regarding claim 16, Choi discloses wherein the radio network controller of the first subsystem is connected to said core network switch and the radio network controller of the second subsystem is connected to a second core network switch, the switch further comprising means responding to reception of an indication that a call transfer condition has been detected by transmitting a call transfer request to the second switch (**col. 2, lines 14-19, where radio**

resource information to be transmitted between MAPs (Mobile Application Parts) in heterogeneous networks: the UMSC (first switch) transmits information to the MSC (second switch)) and means for deducing that the second subsystem is not able to process the call under the first communications from the reception of a transfer failure message in response to transmission **(col. 2, lines 36-38 where handoff is impossible under current situations).**

Regarding claim 17, Choi discloses wherein the first subsystem is of the third generation and the second subsystem is of the second generation **(col. 1, lines 34-42 and Fig. 1, where the first subsystem is 3G and the second subsystem is 2G).**

Regarding claim 18, Choi modified by Soderbacka discloses wherein the first communications service necessitates a higher transmission bit rate than the second communications service **(col. 4, lines 20-28).**

Regarding claim 19, Choi modified by Soderbacka discloses wherein each communications service is associated with coding over at least a segment of the call and the means for requesting a service change comprise means for requesting a coding change over said segment of the call. (see above)

Regarding claim 22, Choi modified by Soderbacka discloses the second communications service is a voice telephone service (**col. 1, lines 54-57 wherein the second communications service is a 2G CDMA voice telephone service**).

Regarding claim 23, Choi discloses wherein Adaptive Multi Rate (AMR) coding is associated with the second communications (**col. 4, lines 20-22- where the WCDMA processing unit includes AMR**).

Regarding claim 25, Choi modified by Soderbacka discloses wherein the means for requesting a service change comprise means for transmitting a service change request to change from the first communications service to the second communications service to the mobile first terminal and to the second terminal (**col. 2, lines 49-55**).

Regarding claim 26, Choi discloses wherein the means for transmitting a change request to the second terminal are provided by at least a switch, a radio network controller and a base station to which the second terminal is connected (**col. 2, lines 14-38**).

Regarding claim 27, Choi discloses wherein the means for requesting a service change include means for requesting a modification of characteristics of at least a radio access bearer of the call **(col. 6, line 28-36 and Fig. 6)**.

Regarding claim 28, Soderbacka teaches wherein said transfer failure message is sent to the first core network switch and is forwarded to the radio .network controller of the first subsystem and the step of informing the first switch of detection by the radio network controller of the first subsystem of a call transfer condition for transferring the call to a base station of the radio access network of the second subsystem is repeated for as long as a transfer failure message is forwarded to the radio network controller of the first **subsystem (paragraph [0063] and [0110])**.

Regarding claim 29, Choi discloses means for forwarding said transfer failure message to the radio network controller of the first subsystem **(paragraph [0110])**.

3. Claims 6, 7, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Choi et al. US 7096020 in view of Soderbacka et al. US 20030114158 and in further view of Bruno et al. US 6262978.

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Regarding claim 6, Choi modified by Soderbacka fails to disclose wherein the coding associated with the first communications service is compatible with the H.324 standard. However, Bruno teaches wherein the coding associated with the first communications service is compatible with the H.324 standard (**col. 2, line 44-50**).

At the time of invention, it would have been obvious to modify the invention of Choi with teaching of Bruno. The motivation would be in order to provide video capability over a phone line (**col. 1, lines 37- 41**).

Regarding claim 7, Bruno discloses wherein the first communications service is a video telephone service (**col. 3, line 34-43**).

Regarding claim 20, Bruno discloses, wherein the coding associated with the first communications service is compatible with the H.324 standard (**col. 2, line 44-50**).

Regarding claim 21, Bruno discloses wherein the first communications service is a video telephone service (**col. 3, line 34-43**).

Conclusion

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1. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Amanuel Lebassi, whose telephone number is (571) 270-5303. The Examiner can normally be reached on Monday-Thursday from 8:00am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Nick Corsaro can be reached at (571) 272-7876. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Amanuel Lebassi
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12312009

Application/Control Number: 10/579,881

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/NICK CORSARO/

Supervisory Patent Examiner, Art Unit 2617